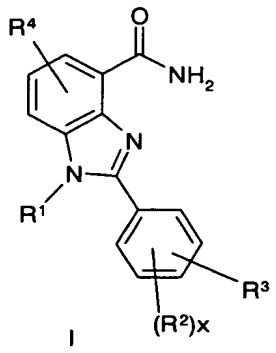
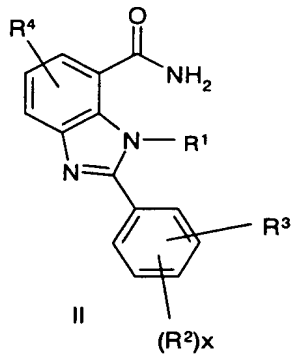
We claim:

1. A compound of the formula I or II



I



II

in which

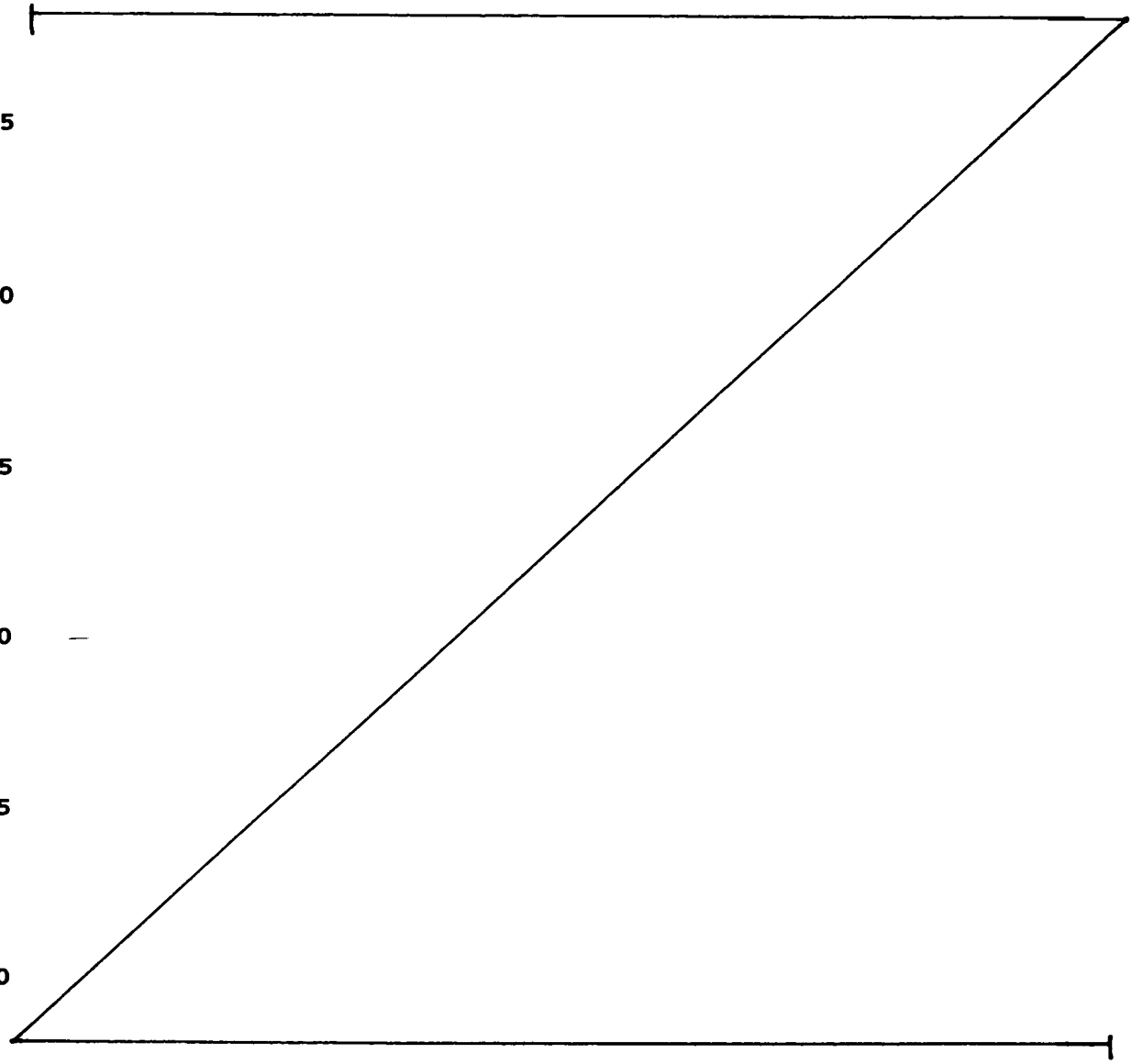
R^1 is hydrogen, branched and unbranched C_1-C_6-alkyl, it also being possible for one C atom of the alkyl radical to carry OR^{11} or a group R^5, where
R^{11} is hydrogen or C_1-C_4-alkyl, and

R^2 is hydrogen, chlorine, bromine, iodine, fluorine, CF_3, nitro, $NHCOR^{21}$, $NR^{22}R^{23}OH$, O-C_1-C_4-alkyl, O-C_1-C_4-alkylphenyl, NH_2, phenyl, it also being possible for the phenyl rings to be substituted by at most two radicals R^{24}, and R^{21} and R^{22} independently of one another are hydrogen or C_1-C_4-alkyl and R^{23} is hydrogen, C_1-C_4-alkyl or phenyl, and R^{24} is OH, C_1-C_6-alkyl, O-C_1-C_4-alkyl, chlorine, bromine, iodine, fluorine, CF_3, nitro, NH_2, and

x may be 0, 1 or 2 and

R^3 is $-D-(F^1)_p-(E)_q-(F^2)_r-G$, where p, q and r may not simultaneously be 0, or is $-E-(D)_u-(F^2)_s-(G)_v$, it also being possible for the radical E to be substituted by one or two radicals A, and if v = 0, E is imidazole, pyrrole, pyridine, pyrimidine, piperazine, pyrazine, pyrrolidine or piperidine, or R^3 is B and

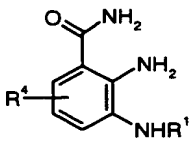
R^4 is hydrogen, chlorine, fluorine, bromine, iodine, branched and unbranched C_1-C_6-alkyl, OH, nitro, CF_3, CN, $NR^{41}R^{42}$, NH-CO-R^{43}, O-C_1-C_4-alkyl, where
R^{41} and R^{42} independently of one another are hydrogen or C_1-C_4-alkyl and



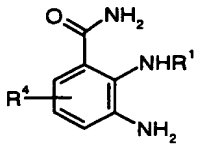
25. The use of compounds of the formula I as claimed in claim 11 for producing drugs for treating immunological diseases such as inflammations and rheumatic diseases such as, for example, rheumatoid arthritis.

26. The use of compounds of the formula I as claimed in claim 11 for producing drugs for treating diabetes mellitus.

27. A compound of the formula XX or XXI



XX



XXI

in which

R^4 = hydrogen and R^1 is as defined in the preceding claims,

and salts thereof.

28. A process for preparing compounds of the formula XX or XXI and salts thereof, which comprises converting the corresponding ester into the amide XX or XXI with hydrazine hydrate in an alcohol and subsequent reduction of the hydrazine with Raney nickel in a polar solvent [sic].

29. The use of compounds of the formula XX or XXI in the synthesis of PARP inhibitors.

30. An in vitro detection method for PARP inhibitors, which comprises

a) incubating an unsupported or supported polyADP-ribosylatable target with a reaction mixture comprising
   a1) a PARP,
   a2) a PARP activator; and
   a3) a PARP inhibitor or an analyte in which at least one PARP inhibitor is suspected;
b) carrying out the polyADP-ribosylation reaction; and
c) determining the polyADP-ribosylation of the target qualitatively or quantitatively using an anti-poly(ADP-ribose) antibody.

31. A method as claimed in claim 30, wherein PARP is preincubated with the PARP activator and the PARP inhibitor or an analyte in which at least one PARP inhibitor is suspected before the polyADP ribosylation reaction is carried out.

32. A method as claimed in either of claims 30 or 31, wherein the polyADP-ribosylatable target is a histone protein.

33. A method as claimed in any of claims 30 to 32, wherein the PARP activator is activated DNA.

34. A method as claimed in any of claims 30 to 33, wherein the polyADP ribosylation reaction is started by adding NAD^+.

35. A method as claimed in any of claims 30 to 34, wherein the unsupported target is labeled with an acceptor fluorophore.

36. A method as claimed in claim 35, wherein the polyADP ribosylation of the unsupported target is determined using anti-poly(ADP-ribose) antibody which is labeled with a donor fluorophore which is able to transfer energy to the acceptor fluorophore.

37. A method as claimed in either of claims 35 or 36, wherein the target is biotinylated histone, and the acceptor fluorophore is coupled thereto via avidin or streptavidin.

38. A method as claimed in either of claims 36 and 37, wherein the anti-poly(ADP-ribose) antibody carries a europium cryptate as donor fluorophore.